## Wilcox Oil Mobilization #1 Equipment and Supplies for OSRTI Activities

Equipment	Provided by	Comments
Sample Collection	ı	
Geoprobe Rig	Region 6/START	Required for soil samples greater than 2 feet. OSRTI is not planning to address the deeper soil delineation at this time.
CMIST Sampler (Pogo)	One is available from OSRTI, should secure others for optimum production	Includes equipment required for assembly and adjustments (wrenches, pliers). Rentals available from Envirostrat for \$150/week. There may be other rentals. Rubber mallets are helpful for pushing sample out of core.
Soil Probe Sampler	OSRTI does not have this piece of equipment	AMS 1" x 36" Plated Replaceable Tip Soil Probe w/24" Slot (AMS Part # 425.52) and heavy duty replaceable tip (AMS Part Number: 425.74). Hex pin connector is preferred over threaded connector (strength). Several probes and tips (4-6) should be available to optimize production and to address expected equipment failure/damage. Special spanner wrench is required for this tool.
Slide Hammer	OSRTI does not have this piece of equipment	AMS makes a threaded slam bar for driving the soil probes (AMS Part Number: 400.96). 2 required, (one for for backup/production). Electric Impact hammer can be used if electricity is available.
Decontamination supplies	Region 6/START	Buckets, DI water, Alconox, Methanol/solvents (if required in SAP), brushes, spray bottles, foil.
Sample locating supplies	Region 6/START	Pin flags, paint (?), 100 foot fiberglass tape (2), measuring wheel
Sample Containers	Region 6/START (?)	1 gallon plastic heavy duty zipper seal bags (1/2 gallon may OK for 9-point samples). 2 to 3 gallon bags for organizing and storing all replicates from one DU/SU.
Documentation	OSRTI	Log books, field sampling forms, sample logs, etc.

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Sample Preparation				
Drying oven (optional)	Region 6/START (?)	If samples are wet or air drying is not effective a small toaster oven is normally used to dry samples at about 100 - 120 F.		
Disaggregation supplies	Region 6/START (?)	Rubber mallet, butcher paper, rolling pin, cookie trays, and heavy duty aluminum foil		
Labeling and sample storage supplies	Region 6/START or OSRTI	Scotch tape, permanent markers, storage boxes		
PPE	Region 6/START (?)	Nitrile gloves, dust masks, eye protection (per HASP)		
Sieves	OSRTI does not have this piece of equipment	10 and 60 mesh Stainless Steel sieves. Either 8 or 12 inch diameter, with lid and catch pan.		
Sieve shaker (optional but recommended)	OSRTI does not have this piece of equipment	Electric sieve shaker increases productivity and helps ensure efficient separation. May be able to rent or borrow this equipment. Required if a large # of samples are processed.		
Balance	OSRTI does not have this piece of equipment	Small analytical scale capable of weighing samples from a few grams to 3 kilograms. Single decimal accuracy is OK.		
Sample bags (for reading XRF)	Region 6/START or OSRTI	Thin walled zip lock sandwich size bags. Store brand OK. These bags will need to be checked for XRF interference prior to use using OSRTI SOP. Can be obtained at time of sampling. Note that all bags for XRF analysis should be from the same lot.		

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Sample Analysis with XRF				
XRF Instrument	One is available from OSRTI, may consider securing another for optimum production	Includes XRF, stand, laptop with XRF software, batteries, charger, USB and power cords,  NOTE: if a rental XRF is used, additional time is required prior to field work to pre-check and develop calibration models.		
XRF standards	One set is available from OSRTI	Only one set is needed.		
Documentation	OSRTI	Sample analysis forms, QC forms, QC Charts, etc., included in SOPs.		

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